

**SECTION 1: IDENTIFICATION**

**Product Name:** *E. coli* O157:H7 Rapid Detection Kit  
**Catalog Number(s):** ETLF-020  
 ETLF-### (where ### represents the number of tests provided with the kit)  
**Manufacturer:** BioAssay Works  
 10075 Tyler Place  
 Suite 18  
 Ijamsville, MD 21754  
**Product Information:** 1-301-874-8888  
**Emergency Phone Number:** Contact Local Poison Control Center or 1-800-222-1222  
**Transport Emergency:** CHEMTREC: 1-800-424-9300 (outside the U.S. 1-703-527-3887)

***The product should be handled by trained laboratory personnel in a laboratory environment as indicated on the package insert/instructions. Not for consumption.***

**SECTION 2: HAZARD(S) IDENTIFICATION**

The lateral flow cassette assemblies (Catalog Number: ETLF) supplied with the kit are exempt from OSHA regulations for an MSDS requirement based on 29 CFR 1910.1200(b)(6)(v) Articles as defined in 29 CFR 1910.1200(c): Article means a manufactured item other than a fluid or particle: (i) which is formed to a specific shape or design during manufacture; (ii) which has end use function(s) dependent in whole or in part upon its shape or design during end use; and (iii) which under normal conditions of use does not release more than very small quantities, e.g., minute or trace amounts of a hazardous chemical (as determined under paragraph (d) of this section), and does not pose a physical hazard or health risk to employees.

**Therefore, this safety data sheet will only address the material safety of the liquid Sample Diluent Buffer – 1X PBS (Catalog Number: PBS-### [where ### represents the volume in mL of Sample Diluent Buffer – 1X PBS provided in the vial/bottle]) supplied with the kit.**

The Sample Diluent Buffer – 1X PBS is an aqueous solution containing approximately 99% water and less than 1% dissolved components. ***There is no data available on the toxicity, hazards, or precautions at the supplied concentrations of the dissolved components. The following information pertains to the components in their undiluted states. The dilution of the components as supplied with this product mitigates their toxicity and any hazards they may present; however, the extent of mitigation is unknown.***

**Classification:**

- Skin Irritant (Category 2), H315
- Eye Irritant (Category 2), H319
- Respiratory Irritant Category 3), H335
- Acute aquatic toxicity (Category 3), H402
- Chronic aquatic toxicity (Category 3), H412

**Signal Word: WARNING**

**Pictogram:**



**Hazard Statements:**

- H315 Causes skin irritation
- H319 Causes serious eye irritation
- H335 May cause respiratory irritation
- H412 Harmful to aquatic life with long lasting effects

**Precautionary Statements:**

- P273 Avoid release to the environment
- P280 Wear protective gloves/protective clothing/eye protection/face protection
- P302 + P352 IF ON SKIN: Wash with soap and water
- P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
- P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – Continue rinsing
- P312 Call a POISON CENTER or doctor/physician if you feel unwell
- P403 + P233 Store in a well-ventilated place. Keep container tightly closed
- P501 Dispose of contents/container to an approved waste disposal service/plant

**Hazards not otherwise classified:** none

<b>SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS</b>
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Chemical Name	CAS #	EC #	REACH Reg. #	Concentration (% by weight)	Classification
Water	7732-18-5	231-791-2	Not Applicable	> 99	-
NaCl	7647-14-5	231-598-3	Not Available	< 0.9	Xi;R36/37/38*
KCl	7447-40-7	231-211-8	Not Available	< 0.03	Aquatic Acute 3; Aquatic Chronic 3; H412*
KH <sub>2</sub> PO <sub>4</sub>	7778-77-0	231-913-4	Not Available	< 0.03	-
Na <sub>2</sub> HPO <sub>4</sub>	7558-79-4	231-448-7	Not Available	< 0.15	-

\* Refer to Section 2

<b>SECTION 4: FIRST-AID MEASURES</b>
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**General Advice:** Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area. Treat symptomatically.

**Eye Contact:** Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

**Skin Contact:** Take off contaminated clothing and shoes immediately. Wash off with soap and copious amounts of water. Consult a physician.

**Inhalation:** Move to fresh air. If not breathing, give artificial respiration. Consult a physician.

**Ingestion:** Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

**Most important symptoms and effects, both acute and delayed:** The most important known symptoms and effects are listed in Sections 2 and 11.

**Indication of immediate medical attention and special treatment needed, if necessary:** No Data Available

<b>SECTION 5: FIRE-FIGHTING MEASURES</b>
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**Suitable extinguishing media:** Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide

**Specific hazards arising from the substance or mixture:** Hydrogen chloride gas, Potassium oxides, Sodium/sodium oxides, Oxides of phosphorus

**Special protective equipment and precautions for fire-fighters:** Wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

## SECTION 6: ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures:** Avoid contact with skin, eyes and clothing. Use personal protective equipment (refer to Section 8). Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

**Methods and materials for containment and cleaning up:** Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided. Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed/sealed containers for disposal (refer to Section 13).

## SECTION 7: HANDLING AND STORAGE

**Precautions for safe handling:** Handle in accordance with cGMP, good industrial hygiene and safety practice. Avoid contact with skin and eyes. Avoid inhalation of vapor or mist.

**Conditions for safe storage, including any incompatibilities:** Keep container tightly closed in a well-ventilated place. Recommended storage temperature: 20-25°C. Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

**Exposure limits:** Contains no substances with occupational exposure limit values

**Engineering controls:** Showers, eyewash stations and ventilation systems - Handle in accordance with cGMP, good industrial hygiene and safety practice. Wash hands before breaks and at the end of the workday.

**Personal Protective Equipment:**

**Eye/face protection:** Snuggly fitting safety goggles or faceshield (8 inch minimum) – Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (U.S.) or EN 166 (E.U.)

**Skin protection:** Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching the glove's outer surface) to avoid possible skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and cGMP. Wash hands with soap and copious amounts of water.

**Body protection:** Complete suit protecting against chemicals – The type of protective equipment must be chosen according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection:** Where risk assessment shows air-purifying respirators are appropriate, use a full-face respirator with multipurpose combination (U.S.) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (U.S.) or CEN (E.U.).

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance:</b>	Clear liquid – Aqueous solution
<b>Odor:</b>	No Data Available
<b>Odor Threshold:</b>	No Data Available
<b>pH:</b>	7.2 to 7.6
<b>Melting Point/Freezing Point:</b>	No Data Available
<b>Initial Boiling Point and Boiling Range:</b>	100°C (212°F)
<b>Flash Point:</b>	No Data Available
<b>Evaporation Rate:</b>	No Data Available
<b>Flammability (solid, gas):</b>	No Data Available (product is a non-flammable liquid)
<b>Upper/Lower Flammability or Explosive Limits:</b>	No Data Available (product is a non-flammable liquid)
<b>Vapor Pressure:</b>	No Data Available

<b>Vapor Density:</b>	No Data Available
<b>Relative Density:</b>	≈ 1.0 g/mL at STP
<b>Solubility:</b>	Water soluble – Currently an aqueous solution
<b>Partition Coefficient: n-octanol/water:</b>	No Data Available
<b>Auto-Ignition Temperature:</b>	No Data Available
<b>Decomposition Temperature:</b>	No Data Available
<b>Viscosity:</b>	No Data Available
<b>Explosive Properties:</b>	No Data Available (Not Applicable)
<b>Oxidizing Properties:</b>	No Data Available

## SECTION 10: STABILITY AND REACTIVITY

**Reactivity:** No Data Available

**Chemical Stability:** Stable under recommended storage conditions (refer to Section 7)

**Possibility of Hazardous Reactions:** No Data Available

**Conditions to Avoid:** No Data Available

**Incompatible Materials:** Strong acids, strong oxidizing agents, Strong acids

**Hazardous Decomposition Products:** Sodium/ sodium oxides, Nitrogen oxides (NO<sub>x</sub>), Sulfur oxides

## SECTION 11: TOXICOLOGICAL INFORMATION

### Information on toxicological effects

**Acute toxicity:** No Date Available

**Inhalation:** No Data Available

**Dermal:** No Data Available

**Skin corrosion/irritation:**

Skin – rabbit Result: Mild skin irritation – 24 h

**Serious eye damage/eye irritation:**

Eyes – rabbit Result: Mild eye irritation – 24 h

**Respiratory or skin sensitization:** No Data Available

**Germ cell mutagenicity**

No Data Available

**Carcinogenicity**

IARC: No component of this product which is present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product which is present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product which is present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product which is present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Reproductive toxicity**

No Data Available

**Specific target organ toxicity - single exposure**

Inhalation - May cause respiratory irritation.

**Specific target organ toxicity - repeated exposure**

No Data Available

**Aspiration hazard**

No Data Available

**Additional Information**

RTECS: Not Available

## SECTION 12: ECOLOGICAL INFORMATION

**Ecotoxicity:** No Data Available

**Persistence and Degradability:** No Data Available

**Bioaccumulative Potential:** No Data Available

**Mobility in Soil:** No Data Available

**Other Adverse Effects:** No Data Available – An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Very toxic to aquatic life.

## SECTION 13: DISPOSAL CONSIDERATIONS

### Waste Treatment Methods

**Product:** Offer surplus and non-recyclable solutions to a licensed disposal company. Dispose of material in accordance with all federal, state, and local regulations.

**Contaminated Packaging:** Dispose of as unused product

## SECTION 14: TRANSPORT INFORMATION

### U.S. DOT HAZARD CLASSIFICATION

Proper Shipping Name: Not Regulated

UN Number: Not Applicable

Hazard Class/Packing Group: Not Applicable

Labels Required: None

DOT Packaging Requirements: Not Applicable

Exceptions: Not Applicable

### IATA/ICAO AIR TRANSPORTATION

Proper Shipping Name: Not Regulated

UN Number: Not Applicable

Hazard Class/Packing Group: Not Applicable

Labels Required: None

IATA Packaging Requirements: Not Applicable

**IMDG:** Not Regulated

## SECTION 15: REGULATORY INFORMATION

**REACH Number:** A registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.

**SARA 302 Components:** No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components:** Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This material contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 371.

**SARA 311/312 Hazards:** Acute Health Hazard - YES  
Chronic Health Hazard - NO

Massachusetts Right to Know Components:	CAS No.	Revision Date
Disodium hydrogenorthophosphate	7558-79-4	2007-03-01

Pennsylvania Right to Know Components:	CAS No.	Revision Date
Disodium hydrogenorthophosphate	7558-79-4	2007-03-01
Potassium dihydrogenorthophosphate	7778-77-0	
Potassium chloride	7447-40-7	
Sodium chloride	7647-14-5	

<b>New Jersey Right to Know Components:</b>	CAS No.	Revision Date
Disodium hydrogenorthophosphate	7558-79-4	2007-03-01
Potassium dihydrogenorthophosphate	7778-77-0	
Potassium chloride	7447-40-7	
Sodium chloride	7647-14-5	

**California Proposition 65:** This product does not contain any substances regulated as hazardous air pollutants (HAPS) under Section 112 of the Clean Air Act Amendments of 1990. This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

**SECTION 16: OTHER INFORMATION**

**HMIS Rating**

Health hazard: 1  
 Chronic Health Hazard: Refer to Section 2  
 Flammability: 0  
 Physical Hazard 0

**NFPA Rating**

Health hazard: 1  
 Fire Hazard: 0  
 Reactivity Hazard: 0

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The information included in this Material Safety Data Sheet is believed to be accurate, complete and current but does not purport to be all inclusive and shall be used as a guide. BioAssay Works makes no representation or warranties with respect to the product described herein, including but not limited to any implied warranties or merchantability or fitness for a particular use. BioAssay Works assumes no liability or responsibility and authorizes no other person to assume any additional liability or responsibility as a result of the use of this product or the information contained in the Material Safety Data Sheet.

